

REMARKS

Claims 1, 2, 7, 8, 15 and 16 are pending in this application. By this Amendment, claims 1 and 2 are amended to incorporate the subject matter of prior claims 11 and 12, respectively, and to delete ruthenium, rhodium, iridium and palladium from the NO oxidation catalyst component list. The claims as amended define over the cited art as discussed more fully below.

No new matter is added by this Amendment. The subject matter added to claims 1 and 2 was previously recited in claims 11 and 12, respectively. The subject matter of new claims 15 and 16 is supported in the original specification, for example in Examples 1 and 2.

I. Rejections Under 35 U.S.C. §102(b)

A. Relying Upon EP 1 004 347

Claims 1, 2, 7, 8, 13 and 14 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by EP 1 004 347 (hereinafter "EP 347"). This rejection is respectfully traversed.

By this Amendment, claims 1 and 2 are amended to include therein the additional limitations previously recited in dependent claims 11 and 12, respectively. Neither claim 11 nor claim 12 was rejected based upon the teachings of EP 347. Accordingly, amended claims 1 and 2 have overcome this rejection.

For at least the foregoing reasons, Applicants respectfully submit that EP 347 fails to teach or suggest the subject matter of claims 1 and 2, or of claims 7 and 8 dependent therefrom. Reconsideration and withdrawal of this rejection are respectfully requested.

B. Relying Upon EP 1 008 378

Claims 1, 2, 7, 8, 13 and 14 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by EP 1 008 378 (hereinafter "EP 378"). This rejection is respectfully traversed.

By this Amendment, claims 1 and 2 are amended to include therein the additional limitations previously recited in dependent claims 11 and 12, respectively. Neither claim 11

nor claim 12 was rejected based upon the teachings of EP 378. Accordingly, amended claims 1 and 2 have overcome this rejection.

For at least the foregoing reasons, Applicants respectfully submit that EP 378 fails to teach or suggest the subject matter of claims 1 and 2, or of claims 7 and 8 dependent therefrom. Reconsideration and withdrawal of this rejection are respectfully requested.

C. Relying Upon Suzuki et al.

Claims 1, 3 and 7 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent No. 5,849,254 (Suzuki). This rejection is respectfully traversed.

By this Amendment, claim 1 is amended to include therein the additional limitations previously recited in dependent claim 11. Claim 11 was not rejected based upon the teachings of Suzuki. Accordingly, amended claim 1 has overcome this rejection.

For at least the foregoing reasons, Applicants respectfully submit that Suzuki fails to teach or suggest the subject matter of claim 1, or of claim 7 dependent therefrom. Reconsideration and withdrawal of this rejection are respectfully requested.

II. Rejections Under 35 U.S.C. §103(a)

A. Relying Upon EP 0 852 966

Claims 1, 2, 7, 8 and 11-14 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over EP 0 852 966 (hereinafter EP 966). This rejection is respectfully traversed.

A characteristic feature of the claimed catalysts is that the catalyst comprises both an NO oxidation catalyst and an NO₂ decomposition catalyst, and the catalyst effects of both are combined to promote oxidation of particulate matter contained in exhaust gas from an internal combustion engine such as a diesel engine. By using the claimed catalysts, a large amount of NO₂ is supplied from the NO oxidation catalyst, after which the NO₂ decomposition catalyst produces active oxygen from the NO₂. This allows efficient supply of

a large amount of active oxygen from the NO contained in the exhaust gas, so that the particulate matter can be oxidized at a high rate even at low temperatures, e.g., below 300°C.

EP 966, on the other hand, describes an exhaust gas purifying catalyst comprising:
a first powder of porous particles supporting rhodium; and
a second powder formed of porous particles supporting platinum and a nitrogen oxide adsorbing material.

The second powder and the first powder are present in a mixed state. See the Abstract.

The Patent Office has alleged that the first powder of EP 966 corresponds to the NO oxidation catalyst and that the second powder corresponds to the NO₂ decomposition catalyst.

Applicants respectfully submit that EP 966 fails to teach or suggest the claimed catalysts including the NO oxidation catalyst. The first powder of EP 966 does not correspond to the NO oxidation catalyst as recited in the present claims.

In EP 966, the catalyst component of the first powder is rhodium. However, the present claims require the catalyst component of the NO oxidation catalyst to be platinum, gold or mixtures thereof. Platinum has a high oxidation capability. While platinum, rhodium and palladium are all noble metals, rhodium and palladium have low oxidation capability and have high decomposition capability. Accordingly, rhodium and platinum are not equivalent in this regard, and one of ordinary skill in the art would not have found it obvious to have replaced the rhodium catalyst component of EP 966 with platinum.

Furthermore, it is submitted that by using a low oxidation capability/high decomposition capability catalyst component such as rhodium, the first powder of EP 966 is more analogous to a NO₂ decomposition catalyst. One would not have replaced rhodium with platinum in the first powder of EP 966 for this additional reason.

Thus, as explained above, EP 966 describes a catalyst in which both the first powder and the second powder have NO₂ decomposition capabilities. EP 966 does not teach or

suggest the claimed catalysts that require both a NO oxidation catalyst and a NO₂ decomposition catalyst.

For all the foregoing reasons, Applicants respectfully submit that EP 966 fails to teach or suggest the subject matter of the present claims. Reconsideration and withdrawal of this rejection are respectfully requested.

B. EP 966 in view of EP 347

Claims 1, 2, 7, 8 and 11-14 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over EP 966 in view of EP 347. This rejection is respectfully traversed.

The Patent Office relied upon EP 347 as allegedly suggesting the use of zeolite having a silica to alumina molar ratio of 40 or greater as a support for the first powder in EP 966.

However, even if EP 347 were to have been combined with EP 966 in the manner alleged by the Patent Office, the claimed subject matter would not have been achieved. EP 347 remedies none of the deficiencies of EP 966 that were discussed extensively above.

For at least the foregoing reasons, Applicants respectfully submit that nothing in either EP 966 or EP 347 would have led one of ordinary skill in the art to the presently claimed invention. Reconsideration and withdrawal of this rejection are respectfully requested.

III. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 2, 7, 8, 15 and 16 are earnestly solicited.

Application No. 10/088,648

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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